Table.

	Autogenous Access (n = 213)		*Frosthetic Access (n = 120)*	
	HR (95% CI)	*p-value*	*HR (95% CI)*	*p-value*
Demographics				
Increasing age (years)	1.01 (0.98–1.03)	0.634	1.00 (0.97–1.03)	0.853
African American Pace	0.56 (0.29–1.09)	0.090	1.48 (0.60–3.67)	0.398
Smoking status				
Current	Ref		Ref	
Former	1.00 (0.55–1.83)	0.999	1.38 (0.61–3.04)	0.455
Never	1.02 (0.49–2.14)	0.949	1.18 (0.50–2.79)	0.714
Comorbidities				
Diabetes	1.21 (0.74–1.98)	0.444	2.12 (1.01–4.44)	0.047
Hypertension	0.88 (0.55–1.40)	0.584	1.45 (0.69–3.05)	0.326
Previous access in same arm	0.78 (0.48–1.25)	0.309	0.83 (0.43–1.63)	0.594
Angiotensin receptor blocker	0.35 (0.15–0.79)	0.012	0.40 (0.17–0.94)	0.035
Beta blocker	0.49 (0.27–0.90)	0.021	1.27 (0.68–2.36)	0.457
Antiplatelet medication	0.75 (0.41–1.37)	0.348	1.02 (0.56–1.86)	0.953
ACE inhibitor	0.80 (0.50–1.27)	0.340	0.51 (0.24–1.06)	0.072
Anti-angina agent	1.05 (0.57–1.95)	0.878	0.65 (0.18–2.30)	0.503
Anticoagulant	0.49 (0.16–1.49)	0.209	N/A[1]	
Calcium channel blocker	0.77 (0.46–1.31)	0.338	0.63 (0.33–1.23)	0.178
Diuretic	0.74 (0.45–1.23)	0.247	1.48 (0.62–3.43)	0.380
"Statin" (HMG Co-A reductase inhibitor)	1.32 (0.77–2.25)	0.312	0.59 (0.27–1.25)	0.166
Anti-hypertensive, other	1.00 (0.57–1.75)	0.998	1.09 (0.40–2.95)	0.871
Lipid-lowering agent, other	1.88 (0.58–6.09)	0.294	N/A[1]	

Adjusted Relative Hazard of Access Failure
[1]Excluded from model due to small sample size using medication (anticoagulant, n =3; lipid-lowering agent, other, n = 1)

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PS174.

Migration, Fracture, and Rupture as Complications of Endovascular Grafts in the Treatment of Arteriovenous Fistula

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Objectives: Endovascular stent grafts are utilized in the rescue of failing AV access. Reports claim the superiorty of stent grafts and recommended these as a first line treatment. We have observed a rise in the number of complications related to stent grafts in our patients.

Methods: We reviewed all patients who had endovascular stent grafts placed for treatment of failing dialysis access over the last 36 months. A series of 27 consecutively placed stent grafts was reviewed for stent migration, fracture, hemorrhage and rupture at the site of the stent grafts. Hospital charts were reviewed to assess for indications, hemodynamic stability, transfusion requirement, and outcome.

Results: Of 27 stent grafts placed, 9 were for pseudoaneurysm (PS), 15 for stenosis (ST), and 3 for a combination (PS/ST). Six patients (22%) presented with complications (Table 1) related to migration, fracture, or rupture. Four of the six patients were in the pseudoaneurysm treatment group. In all cases migration or fracture of the stent graft lead to pseudoaneurysm formation. Four patient's required ligation of the fistula to treat the complication and two dialysis access sites were salvaged.

Conclusions: Stent grafing of AV fistulas is seen in increasing numbers of patients. Significant life threatening complication can arise when fracture and migration of the stent grafts occur. Herald bleed with a previously placed stent graft may be a harbinger of future rupture. Rupture appears less likely when stent grafts are used to treat stenosis; surgical revision in the case of pseudoaneurysm should be considered for access preservation.

Table I.

Presentation and outcomes of stent graft complications	*# of pts*
Presented with significant bleeding episode	5
Required emergent/urgent operation	5
Herald Bleed (At least 72 hrs prior to presentation)	4
Significant hemodynamic instability (SBP <90)	3
Required blood transfusion (> 1 unit PRBC)	2
Cardiopulmonary Arrest	1
Mortality	0

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PS176.

Thirty Day Outcomes following Brachiocephalic and Brachiobasilic Arteriovenous Fistula Formation: National Benchmarks for Standard of Care

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Objectives: Dialysis access is one of the most frequently performed vascular procedures, however, there is a paucity of risk-adjusted, population-based data for postoperative outcomes following these procedures resulting in a lack of national benchmarks for quality of care. The objective of this study was to report 30-day outcomes following brachiocephalic and brachiobasilic arteriovenous fistula (AVF) formation.

Methods: Patients were identified from the American College of Surgeons' 2007-08 National Surgical Quality Improvement Program (NSQIP) - a multicenter (more than 180 hospitals), prospective database.

Results: In 2,037 patients, median age was 63 years with 53.7% being males and 52.1% Caucasians. Median body mass index was 28.3 kg/m2. Eighty nine percent patients had hypertension, 47.0% were diabetics, and 78.7%